amdt F

SEQUENCE LISTING

<110> Palese, Peter
Garcia-Sastre, Adolfo

<120> RECOMBINANT NEGATIVE STRAND RNA VIRUS
EXPRESSION SYSTEMS AND VACCINES

<130> 7682-048

<140> 09/396,539
<141> 1999-09-14

<150> 09/106,377
<151> 1998-06-29

<150> 08/252,508
<151> 1994-06-01

F3

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tacgaggaaa tgttcctgtt a 21

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Gln Leu Val Trp Met Ala Cys Asn Ser Ala Ala Phe Glu Asp Leu Arg
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Val Leu Ser

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<212> PRT
<213> Influenza virus

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<223> epitope within the NP protein

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Thr Tyr Gln Arg Thr Arg Gln Leu Val Arg Leu Thr Gly Met Asp Pro
1 5 10 15

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gaagcttaat acgactcact ataagtagaa acaagggtgt tttttcatat catttaaact 60
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<400> 5
gaagcttaat acgactcact ataagcaaaa gcagggtgaa gtttaaatga tatgaaaaaa 60
caccttgtt tctactgaat tcattcttct gcagg 95

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agcttaatac gactcactat aagatctatt aaacttcacc ctgcttttgc tgaattcatt 60
cttctgca 68

<210> 7
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gaagaatgaa ttcagcaaaa gcagggtgaa gtttaataga tcttatagtg agtcgtatta 60

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ccgaattctt aatacgactc actataagta gaaacaaggg tg 42

<210> 9
<211> 30
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<210> 10
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cacccuuguu ucuacu 16

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<212> DNA
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tataccaccg ttgatatatc ccaatcgcat cgtaaa 96

<210> 21
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ttatgtcttt gtcaccctgc ttttgctgca gggcgt 96

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<400> 22
actgcgatga gtggcagggc ggggcgtaat agat 34

<210> 23
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<400> 23
ctagatctat tacgccccgc cctgccactc atcgcagt 38

<210> 24
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<400> 24
actgcgatga gtggcagggc ggggcgtaat agat 34

<210> 25
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<400> 25
ctagatctat tacgccccgc cctgccactc atcgcagt 38

<210> 26
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ctagacgccc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aaatcactgg 60
gtataccacc gttgatatat cccaatcgca tcgtaaa 97

<210> 27
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<223> Primer for construction of plasmid pIVACAT1

<400> 27
gttctttacg atgcgattgg gatatatcaa cggtggtata cccagtgatt tttttctcca 60
ttatgtcttt gtcaccctgc ttttgctgca gggcgt 96

<210> 28
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NAv

<400> 28
cggaattctc ttcgagcgaa agcaggagtt 30

<210> 29
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NAv mut 2

<400> 29
catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a 51

<210> 30
<211> 51

<212> DNA
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<400> 30
catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a 51

<210> 31
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NAv mut 2

<400> 31
aatgtatcct attttataat ctagattttg gtcgaaactc acc 43

<210> 32
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NA/BIP

<400> 32
ggccactagt aggtcgacgc cggc 24

<210> 33
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NA/BIP

<400> 33
gcgctggcca tcttgccagc ca 22

<210> 34
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<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NA/BIP-CAT

<400> 34
agaaaaaaat cactggg 17

<210> 35
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NA/BIP-CAT

<400> 35
ttacgccccg ccctgcc 17

<210> 36
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3BIP-NA

<400> 36
gcgcatcgat aggtcgacgc cgg 23

<210> 37
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3BIP-NA

<400> 37
ggccatcgat ccaatggtta ttattttctg gtttggattc atcttgccag ttggg 55

<210> 38
<211> 91
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3GP2/BIP-NA (L-primer)

<400> 38
atgactggat ccgctagcat ggccatcatt tatctcattc tcctgttcac agcagtgaga 60
ggggaccaga tagaagaatc gcaaaaccag c 91

<210> 39
<211> 39
<212> DNA
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<220>
<223> Primer for construction of pT3GP2/BIP-NA (M-primer)

<400> 39
atgacagaat tcgtcgactt atctattcac tacagaaag 39

<210> 40
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<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3GP2/BIP-NA

<400> 40
gcgcgaagac gcagcaaaag caggagttta agctagcatg gccatcattt atc 53

<210> 41
<211> 38
<212> DNA
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<220>
<223> Primer for construction of pT3HGP2/BIP-NA

<400> 41
cgatggatcc gctagcttgg aatcgatggg ggtgtatc 38

<210> 42
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<220>
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<400> 42
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<210> 43
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<220>
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<400> 43
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<210> 44
<211> 28
<212> DNA
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<400> 44
gcgcgaattc tcttcgagca aaagcagg 28

<210> 45
<211> 18
<212> DNA
<213> Influenza virus

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<400> 45
agagatgaat tgccggtt 18

<210> 46
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<400> 46
Glu Leu Asp Lys Trp Ala
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<220>
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<400> 47
ccugcuuuyg cu 12

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<400> 48
aguagaaaca aggguguuuu uu 22

<210> 49
<211> 52
<212> RNA
<213> Influenza A virus

<400> 49
aguagaaaca aggguguuuu uucauaucau uuaacuucac ccugcuuuug cu 52

<210> 50
<211> 53
<212> RNA
<213> Influenza A virus

<400> 50
agcaaaagca gggugaaguu uaaaugauau gaaaaaacac ccuuguuucu acu 53

<210> 51
<211> 30
<212> RNA
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<400> 51
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<210> 52
<211> 43
<212> RNA
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<220>
<223> Primer for generate mutagenesis sequence within viral gene segments

<400> 52
aguagaaaca aggguguuuu uucagaucua uuacgccccg ccc 43

<210> 53

<211> 15
<212> RNA
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<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 53
aguagaaaca aggag 15

<210> 54
<211> 14
<212> RNA
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<220>
<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 54
aguagaaaca agag 14

<210> 55
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<220>
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<220>
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<400> 57
cctgcagaag aatga 15

<210> 58
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<220>

<223> Primer for generate mutagenesis sequence within viral gene segments

<400> 58
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<210> 59
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<220>
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<210> 61
<211> 53
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<400> 61
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<210> 62
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tataccaccg ttgatatatc ccaatcgcat cgtaaa 96

<210> 63
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NAv

<400> 63
ccaagcttat taaccctcac taaaagtaga aacaaggagt tt 42

F3 cont'd